

Class : XIth
Date :

Subject : BIOLOGY
DPP No. : 5

Topic :- Biomolecules

- Name the four elements called 'Big-four' which make up 95% of all elements found in a living system
a) C, H, O, P b) C, H, O, N c) C, N, O, K d) C, H, O, S
- Proteins are heteropolymers which are made up of type of monomers of amino acids
a) 10 b) 4 c) 20 d) 3
- Catabolic and anabolic pathways are often coupled in cell. Why?
a) Both the path are the same energy b) The free energy released from are pathway is used to drive other
c) The intermediate of a catabolic pathway are used in the anabolic pathway d) Their enzymes are controlled by their activators and inhibitors
- Molecular weight of protein is
a) >12000 b) >6000 c) <12000 d) 600-3000
- Name the disaccharide which is the major sugar of insect haemolymph
a) Trehalose b) Chitin c) Cellulose d) All of these
- One turn of DNA has nucleotide pairs
a) 8 b) 100 c) 6 d) 10
- Phospholipids are
a) Amphipathic b) Amphibolic c) Hydrophobic d) None of these
- The following reaction is catalysed by which of the enzyme?
$$\text{NADH} + \text{H}^+ + \frac{1}{2}\text{O}_2 \rightarrow \text{NAD}^+ + \text{H}_2\text{O}$$

a) Hydrolases
b) Cytochrome oxidases
c) Transferases
d) Lyases

9. Why metabolic pathways are comparable to automobile traffic in a city?
a) Because they have definite direction b) Because they result in clumsiness
c) Because they result in massive production of d) None of the above
toxic compounds
10. A bond formed between carboxyl group of one amino acid and amino group of adjacent amino acid, is called
a) Peptide bond b) Hydrogen bond c) Covalent bond d) All of these
11. In animal tissues, the categories of compounds present are called
a) Molecules b) Primary metabolites c) Secondary Metabolites d) Biomolecules
12. Cellulose is a polymer of
a) α – glucose b) α – fructose c) β – glucose d) β – fructose
13. Proteins with catalytic power are called
a) Reactants b) Substrate c) Co-factors d) Enzymes
14. The enzyme which converts corn starch into fructose rich corn syrup is
a) Amylase b) Glucoamylase c) Glucoisomerase d) All of these
15. The globular proteins undergo structural changes, in response to extremes of pH or temperature, the process called
a) Renaturation b) Denaturation c) Combination d) Both (a) and (b)
16. Which of the following is a disaccharide?
a) Glucose b) Fructose c) Sucrose d) Galactose
17. During Meselson and Stahl's experiments, heavy DNA was distinguished from normal DNA by centrifugation in
a) CsOH gradient b) $^{14}\text{NH}_4\text{Cl}$ c) $^{15}\text{NH}_4\text{Cl}$ d) CsCl gradient
18. Protein in silk thread is
a) Fibroin b) Keratin c) Albumin d) Globulin
19. What are proenzymes?
a) Inactive form of enzymes b) Active form of enzymes
c) Neutral form of enzymes d) None of these

20. Which of the following is the simplest amino acid?

a) Tyrosine

b) Asparagine

c) Glycine

d) Alanine

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